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STATE CERTIFICATION OF UNDERGROUND STORAGE TANKS

Report No. 98-113

April 15, 1998

Office of the Inspector General
Department of Defense

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Acronyms

RCRA
UST

Resource Conservation and Recovery Act
Underground Storage Tank



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202

April 15, 1998

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE
(ENVIRONMENTAL SECURITY)

SUBJECT: Audit Report on State Certification of Underground Storage Tanks
(Report No. 98-113)

We are providing this report for your review and comment. This report is one in a series about DoD management of underground storage tanks.

DoD Directive 7650.3 requires that all recommendations and potential monetary benefits be resolved promptly. Because the Deputy Under Secretary of Defense (Environmental Security) did not comment on a draft of this report, we request that the Deputy Under Secretary of Defense (Environmental Security) provide comments on the final report by May 15, 1998.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Joseph P. Doyle, Audit Program Director, at (703) 604-9348 (DSN 664-9348) or Ms. Addie M. Beima, Audit Project Manager, at (703) 604-9231 (DSN 664-9231). See Appendix F for the report distribution. The audit team members are listed inside the back cover.

A handwritten signature in black ink, reading "Robert J. Lieberman", is positioned above the typed name.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 98-113
(Project No. 6CK-5051.04)

April 15, 1998

State Certification of Underground Storage Tanks

Executive Summary

Introduction. This audit was part of the overall audit of "DoD Management of Underground Storage Tanks," (Project No. 6CK-5051). The overall audit was jointly conducted by the Inspector General, DoD, and the Army, Navy, and Air Force audit agencies. The audit was performed in response to a Senate Armed Services Committee inquiry about whether state environmental regulatory agencies would be able to certify that DoD underground storage tanks were compliant with the Resource Conservation and Recovery Act, Subtitle I, after December 22, 1998.

Audit Objectives. The audit objectives were to identify each state's underground storage tank compliance policies and to determine the extent to which DoD was meeting those regulatory requirements. We also determined whether DoD and state environmental regulatory agencies were reconciling their respective storage tank inventories.

Audit Results. Significant variances existed between state- and DoD-generated underground storage tank inventories. Operations could be disrupted at some DoD installations after December 22, 1998, if state regulatory agencies do not obtain accurate data with which to assess storage tank compliance with the Resource Conservation and Recovery Act, Subtitle I. See Part I for a discussion of the audit results.

Summary of Recommendations. We recommend that the Deputy Under Secretary of Defense (Environmental Security) require DoD underground storage tank managers to reconcile installation inventories with state-generated inventories, report discrepancies to state environmental regulatory officials, work with state environmental officials to reconcile discrepancies, and to report reconciliations to the Assistant Deputy Under Secretary of Defense (Environmental Quality).

Management Comments. The Deputy Under Secretary of Defense (Environmental Security) did not respond to a draft of this report that was issued on January 23, 1998. Therefore, we request that the Deputy Under Secretary of Defense (Environmental Security) provide comments by May 15, 1998.

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Part I - Audit Results

Audit Background

This audit is part of an overall audit of "DoD Management of Underground Storage Tanks," (Project No. 6CK-5051). The overall audit was jointly conducted by the Inspector General, DoD and the Army, Navy, and Air Force audit agencies. This audit was performed in response to an inquiry from the Senate Armed Services Committee.

A contractor working for the state of Georgia contacted staff of the Senate Armed Services Committee and alleged that some states, including Georgia, may not be able to certify that DoD-owned underground storage tanks (UST) are compliant with the Resource Conservation and Recovery Act, Subtitle I, (RCRA) after December 22, 1998. The complainant maintained that DoD installations in Georgia used unqualified contractors to remove, upgrade, and replace USTs, and did not provide required documentation to enable State environmental officials to certify that Federally-owned USTs comply with RCRA.

Based on the complainant's allegations, the Associate Majority and the Minority counsels for the Senate Armed Services Committee expressed concerns to the Inspector General, DoD, that some states might not be able to certify the compliance of DoD USTs with RCRA.

Regulated USTs. RCRA defines a UST as any tank and connected piping that contains a regulated substance and has ten percent or more of its volume underground. Regulated substances include motor fuels, jet fuels, lubricants, petroleum solvents, and used oils. USTs storing heating oil for use on the premises where they are located are exempt from RCRA.

UST Criteria. USTs owned and operated by DoD are subject to Federal, state, and local statutory and regulatory guidance. Federal UST statutory provisions are found in 42 United States Code 6991-6991h. Implementing regulations are located in Title 40 Code of Federal Regulations, Chapter 1, Part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks." We considered both statutory and regulatory requirements in our analysis of state certification of USTs. References to RCRA in this report include both the statute and regulation. USTs addressed in this report are also subject to state-specific environmental regulations.

Federal Regulations. RCRA sets minimum standards for spill, overfill, and corrosion protection mechanisms to be included in new USTs as well as standards for upgrading, replacing, and closing existing USTs. Existing USTs (those installed before December 22, 1988) were required to have functional leak detection methods by December 1993. By December 22, 1998, existing USTs must be upgraded to have spill, overfill, and corrosion protection; otherwise the USTs must be either removed, closed in place, or replaced with a new UST. New USTs must be installed according to industry codes, and must have leak detection as well as spill, overfill, and corrosion protection.

State Regulations. According to RCRA, states may establish and administer their own UST programs. Also, states may impose stricter standards on UST owners and operators than the minimum standards provided in RCRA. However, those states may not broaden their standards to include storage tanks that are expressly exempted by RCRA. Generally, state environmental regulatory agencies had adopted the Federal minimum UST compliance standards provided in RCRA (Appendix D). Most state environmental officials planned to physically inspect USTs to determine whether they were compliant with regulatory requirements. They also planned to issue permits authorizing compliant USTs to receive products and withhold product delivery to noncompliant USTs.

Audit Objectives

The audit objectives were to identify each state's UST compliance policies, and to determine the extent to which DoD was meeting those regulatory requirements. We also determined whether DoD and state environmental regulatory agencies were reconciling their respective storage tank inventories. See Appendix A for a discussion of the audit process, Appendix B for a summary of prior coverage, and Appendix C for a discussion of other matters of interest.

UST Inventory Reconciliation

Significant variances existed between state- and DoD-generated underground storage tank inventories. The variances occurred because DoD UST managers and state environmental regulatory officials were not reconciling their UST inventories with each other. As a result, operations could be disrupted at some DoD installations after December 22, 1998, if state regulatory agencies do not obtain accurate data with which to assess DoD storage tank compliance with the Resource Conservation and Recovery Act, Subtitle I.

Variances in UST Inventories

The audit identified significant variances between state- and DoD-generated UST inventories. We compared DoD UST inventories that had been reconciled by the auditors during the overall audit of "DoD Management of Underground Storage Tanks" with state-generated inventories for those sites. Although state environmental regulatory officials and DoD UST managers felt they appropriately maintained their respective inventories, we identified 1,498 discrepancies ($1,011 + 487 = 1,498$) in the data provided by 28 of 31 states. The total number of variances is the sum of the state and DoD variances. Three states could not or did not provide the requested data. State inventories contained 1,011 USTs that were not included in DoD-generated inventories, and DoD reported 487 USTs that were not included in state-generated inventories. In the aggregate, 28 states reported that the DoD installations had 524 ($3,358 - 2,834 = 524$) more USTs than the installations reported (see totals in Appendix E). For example, the State of Georgia inventory included 238 more USTs at Fort Benning than the installation reported. On the other hand, Fort Campbell, Kentucky, officials reported 75 USTs that were not included in state-generated inventories.

Reconciliation of UST Inventories

Neither DoD UST managers nor state environmental regulatory agency officials were required to reconcile their UST inventories with each other. Also, DoD and state regulatory officials were not certain why variances existed between the inventories.

DoD Reconciliation Requirements. DoD UST managers were not required to reconcile their UST inventories with state-generated inventories. According to the Assistant Deputy Under Secretary of Defense (Environmental Quality) it is their policy to comply with state environmental regulatory agency requirements. DoD is committed to the goal of ensuring that all of its USTs comply with state regulations by December 22, 1998. However, DoD policy and procedures governing USTs did not require managers to reconcile their inventories with state-generated inventories as a measure of how well they were meeting those goals. As a result, UST managers did not consider such reconciliations to be a

priority. In fact, a review of UST records at DoD installations indicated that little effort was being made to reconcile with state-generated UST inventories beyond the submission of required declaration and notification documentation on a tank-by-tank basis. This practice did not disclose discrepancies with state inventories that could present problems after December 1998. Given the approaching RCRA deadline, and the number of discrepancies identified between state- and DoD-generated inventories, the Deputy Under Secretary of Defense (Environmental Security) should require DoD UST managers to work with state officials to identify and reconcile discrepancies.

State Reconciliation Efforts. State environmental regulatory agency officials were not required to reconcile their UST inventories with DoD. However, most state officials contacted stated that they were satisfied that DoD was complying with regulatory requirements. Environmental officials in 27 of the 31 states contacted stated that they used DoD declaration and notification documents to adjust their respective UST inventories. However, 28 of the 31 state-generated inventories did not agree with corresponding DoD-generated inventories.

Why Variances Exist. Without performing reconciliations, state regulatory officials and DoD managers could not be certain why variances existed between their respective inventories. However, they believed that the variances were frequently the result of untimely documentation. For instance, state environmental officials would not have received or recorded declaration and notification documentation to adjust their inventories to reflect DoD storage tank upgrade, removal, or installation actions. This was due in part to DoD not sending state environmental regulatory agencies notice of changes in the status of USTs until final site survey reports were completed, which was in keeping with RCRA guidance. In situations where clean-up or remediation action was involved, it could take months to prepare and submit final site reports. In other cases, the states had received the documents but had not recorded them for various reasons. Still, other states did not adjust their inventories until the end of the fiscal year or when they issued annual permits authorizing product delivery to USTs. In a few states, the variances were caused by a lack of sufficient program emphasis. For example, 3 of the 31 states contacted either could not provide UST site information or did not maintain reliable UST databases to construct inventories. Neither state nor DoD officials were certain why the variances occurred or that they would be corrected before the December 1998 deadline. DoD reconciliation of UST inventories could encourage states to emphasize their programs in preparation for that deadline.

Disruption of Services

Operations at some DoD installations may be disrupted after December 22, 1998. A comparison of state- and DoD-generated UST inventories showed a total of 1,498 discrepancies that could result in operational disruptions at DoD installations. To encourage RCRA compliance, environmental regulatory officials in some states, including the state of Georgia, plan to withhold product delivery to noncompliant USTs, effectively shutting down operations after December 22, 1998. State regulatory officials also plan to fine or penalize

UST Inventory Reconciliation

anyone delivering products to a UST without a valid state permit. As a result, operations could be curtailed at the 487 USTs on DoD installations that were not included in state inventories. Operations could be curtailed until the tanks are properly registered with the states and issued permits for product delivery. On the other hand, registration and permit issuance for compliant USTs could be delayed while state inspectors assess the status of the 1,011 USTs included in state inventories even though a review of DoD declaration and notification documentation indicated they should have been removed. Given the significant number of discrepancies, and the time that could be required to correct them, it is in the best interest of DoD to reconcile its UST inventories with state-generated inventories before the December 1998 deadline to minimize potential operational disruptions.

Summary

There is a total of 1,498 discrepancies between 28 of 31 state-generated UST inventories and corresponding DoD-generated inventories. Each of these discrepancies represents an opportunity for operations to be disrupted at a DoD installation if they are not resolved before December 22, 1998. Therefore, it is in the Department's best interest to resolve these discrepancies before December 1998 to minimize operational disruptions and demonstrate its commitment to comply with state and Federal RCRA requirements.

Recommendations For Corrective Actions

We recommend that the Deputy Under Secretary of Defense (Environmental Security) issue policy to DoD underground storage tank managers requiring them to:

1. Reconcile state- and DoD-generated underground storage tank inventories.
2. Report discrepancies to state environmental regulatory agencies.
3. Work with state environmental officials to resolve identified discrepancies.
4. Report reconciliations to the Assistant Deputy Under Secretary of Defense (Environmental Quality).

Management Comments

The Deputy Under Secretary of Defense (Environmental Security) did not respond to a draft of this report. Therefore, we request that the Deputy Under Secretary of Defense (Environmental Security) provide comments by May 15, 1998.

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Part II - Additional Information

Appendix A. Audit Process

Scope

The audit focused on state- and DoD-generated UST inventories and RCRA programs in the 31 states that had the DoD installations reviewed during the overall audit of "DoD Management of Underground Storage Tanks." We reviewed state RCRA standards, the methods states planned to use to assess DoD compliance with those standards, contractor certification requirements, and the sufficiency of UST documentation provided by DoD installations.

Methodology

We interviewed environmental officials from 31 states to:

- identify the standards and methods state environmental regulatory agencies planned to use to assess DoD compliance with their respective RCRA programs,
- determine whether DoD UST managers or state environmental officials reconciled their respective UST inventories,
- determine whether state environmental regulatory officials were satisfied with the UST documentation the DoD installations were providing, and
- determine whether the state environmental regulatory agencies required UST contractors to be licensed or certified.

We used inventory reconciliation data gathered by the Inspector General, DoD, and Army, Navy and Air Force audit agencies at 83 DoD installations during the overall audit of "DoD Management of Underground Storage Tanks," (Project No. 6CK-5051) to determine whether state and DoD UST inventories were reconciled. These 83 DoD installations were located in the 31 states contacted during this audit. The Quantitative Methods Division statistically selected the 83 DoD installations from a universe of 222 DoD installations that reported more than 10 USTs to the Assistant Deputy Under Secretary of Defense (Environmental Quality) for the first half of FY 1996 (October 1995 - March 1996). We compared the standards the states planned to use to assess UST compliance with the minimum Federal standards provided in RCRA to determine if state standards were stricter or broader.

Audit Type, Dates and Standards. We performed this program audit from June 1997 through December 1997 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. We did not use computer-processed data for this audit.

Contacts During the Audit. We visited the Associate Majority and Minority Counsels from the Senate Armed Services Committee and contacted officials from 31 state environmental regulatory agencies.

Appendix B. Summary of Prior Coverage

Inspector General, DoD

Inspector General, DoD, Report No. 98-021, "Management of Underground Storage Tanks at Defense Logistics Agency Centers," November 13, 1997. The report states that the Defense Logistics Agency reported inaccurate UST data to the Assistant Deputy Under Secretary of Defense (Environmental Quality); did not implement title 50, United States Code, Section 98, "Strategic and Critical Materials Stock Piling Act," or Defense Planning Guidance to establish plans and provide adequate funds to bring noncompliant USTs into compliance with RCRA; and did not maintain complete UST files. The Defense Logistics Agency could not provide reliable assurance that all underground storage tanks would be compliant with RCRA by December 22, 1998. The report recommends that the Director, DLA direct the DLA centers to establish management controls to ensure that current data was provided to the Assistant Deputy Under Secretary of Defense (Environmental Quality); fully document and support UST projects in future funding requests; ensure that information relative to USTs was shared with tank managers and properly documented in centralized UST files; and obtain all Environmental Protection Agency required documentation and maintain the documents in a separate file for each UST. DLA concurred with recommendations to establish management controls to ensure that UST information reported to the Assistant Deputy Under Secretary of Defense (Environmental Quality) was current, and to maintain documentation relative to USTs in centralized files. DLA partially concurred with recommendations to comply with Defense Planning Guidance and to maintain UST documents at the UST location.

Inspector General, DoD, Report No. 98-017, "Upgrade of the Interim TANKMAN System," November 7, 1997. The report states that it was not cost-effective to proceed with the upgrade of the interim Army Tank Management System. The Assistant Deputy Under Secretary of Defense (Environmental Quality) would have spent \$98,000 for unnecessary upgrades to the Army Tank Management System. The report did not make recommendations because the Assistant Deputy Under Secretary agreed with the preliminary audit finding and the Defense Environmental Security Corporate Information Management office discontinued the upgrade and reprogrammed \$98,000 to other projects while the audit was ongoing.

Inspector General, DoD, Report No. 97-208, "Management of Underground Storage Tanks at Fort Bragg," August 26, 1997. The report concludes that Fort Bragg could not provide a verifiable inventory of USTs on the installation and did not have a plan or adequate funds to guarantee that at least 212 regulated USTs on Fort Bragg would comply with RCRA by December 22, 1998. The report recommends development of a complete verifiable inventory, determination of the status of UST compliance with RCRA, and development of a plan and provision of adequate funds to bring noncompliant USTs into compliance with RCRA. The report also recommends

that steps to test controls over the management of USTs be included in Fort Bragg's Environmental Natural Resources Division assessable unit. The Army concurred with all of the audit recommendations.

U.S. Army

U.S. Army Audit Agency Audit Report: AA 98-134, "Management of Underground Storage Tanks," 16 March 1998. The audit evaluated the Army status of compliance with Resource Conservation and Recovery Act, Subtitle I requirements at 24 Army activities. The report concludes that the Army made significant progress in complying with the Resource Conservation and Recovery Act, Subtitle I requirements for underground storage tanks. The report also concludes that the Army still may not be able to achieve full compliance by the 22 December 1998 deadline. The report recommends establishing a "Tiger Team" to add emphasis to the underground storage tank program and to assess the status of underground storage tank compliance with the Resource Conservation and Recovery Act, Subtitle I at all Army activities; requiring all Army activities to perform a one-time reconciliation of their underground storage tanks with records of the responsible State regulatory office; establishing more frequent interim reporting of compliance status of underground storage tanks through commanders at all levels; issuing guidance that requires plans to address compliance actions needed, timeframes for the actions, funds required for the compliance actions, and projects or contracts that will cover the compliance actions; scrubbing the FY 98 program budget to prioritize underground storage tanks projects; and obtaining definitive clarification of DoD and Environmental Protection Agency policies and legal positions on heating oil tanks and oil-water separators. The Army concurred with all of the audit recommendations.

The U.S. Army Corps of Engineers, Huntsville Division, "Environmental Compliance Review Report," September 1995. The report identifies 10 UST deficiencies at the Defense Supply Center Richmond. The report concludes that the Defense Supply Center Richmond was in the process of preparing an up-to-date UST inventory, but the inventory contained errors. The report also concludes that they improperly labeled and overfilled USTs. Officials at the Defense Supply Center Richmond have completed an accurate inventory and corrected the other deficiencies identified in the report.

U.S. Navy

Naval Audit Service NAVADUDSVC P-7520.1, Audit Report "Management of Underground Storage Tanks," 018-98, 12 January 1998. The report concludes that the Navy and Marine Corps were meeting the objectives of the underground storage tank program. Plans for bringing tanks into compliance with Resource Conservation and recovery Act requirements were adequate, with sufficient funding. The report also concludes that the Navy and Marine Corps reported inaccurate underground storage tank data to the Office of the Deputy

Appendix B. Summary of Prior Coverage

Under Secretary of Defense (Environmental Security). The report recommends that the Chief of Naval Operations (N45) and Commandant of the Marine Corps (LFL) take steps to report accurate underground storage tank data to the Deputy Under Secretary of Defense (Environmental Security). The report also recommends that the two commands explicitly define what represents an underground storage tank for reporting purposes. The Navy concurred with the audit recommendations.

U. S. Air Force

Air Force Audit Agency Project 97052025, Report on "Underground Storage Tank Environmental Compliance," August 25, 1997. The audit evaluated Air Force compliance with the Resource Conservation and Recovery Act. The report concludes that overall, Air Force complied with environmental requirements for USTs and should have all noncompliant tanks upgraded, replaced, or closed by December 1998. However, Air Force managers did not accurately report March 1996 UST information to the Office of the Secretary of Defense or always reconcile their UST inventories with state-generated inventories. The report contains no recommendations because the Inspector General, DoD, was addressing those issues in the overall audit of "DoD Management of Underground Storage Tanks."

Appendix C. Other Matters of Interest

Environmental regulatory agency officials in the 31 states contacted indicated that some states had stricter UST standards than those provided in the Federal RCRA standards. Most state officials were satisfied that DoD was complying with their RCRA guidelines including providing them with required declaration and notification documentation and using state-certified contractors.

Stricter UST Standards. Six of the 31 states we contacted had UST standards that were stricter than the Federal RCRA standards. For example, the state of Delaware had adopted UST regulations that were more strict than the Federal standards. The state UST Compliance Program Manager stated that Delaware required UST owners and operators to:

- maintain inventory control records for each UST and conduct a monthly reconciliation of those records;
- install secondary containment USTs in certain areas;
- not use tank gauging except for used oil tanks with a capacity of 2,000 gallons or less; and
- have a leak detection and spill prevention system on all motor fuel tanks by December 31, 1990.

None of the states we contacted had adopted broader standards than those provided for in RCRA.

UST Documentation. State environmental regulatory agency officials in 29 of the 31 states contacted were satisfied that DoD was meeting their respective UST documentation requirements. Environmental officials in these states were confident that DoD officials were properly registering new USTs and notifying them of UST removals and upgrades. The state responses were consistent with the review of UST files made during the overall audit of "DoD Management of Underground Storage Tanks," which concluded that DoD installations were creating and maintaining RCRA-required declaration and notification documentation. The remaining two states were unable to determine whether DoD was complying with their documentation requirements. These states did not maintain sufficient UST data to determine whether DoD was providing RCRA-required documentation.

Appendix C. Other Matters of interest

Contractor Certification. Most state officials were satisfied that DoD was complying with requirements to use state certified contractors. Twenty-two of the 31 states contacted had implemented UST contractor certification programs. According to environmental officials in these states, UST contractors must be certified or licensed to maintain or handle USTs. In every instance, state environmental officials were confident that DoD installations were using properly certified contractors to upgrade, replace, remove, and install USTs.

Appendix D. State RCRA Implementation Survey Results

State	State Uses DaD (IST) Data (Y/N)	DaD Provides Required Documents (Y/N)	Contractor Certification Program (Y/N)	Method Used to Assess Compliance	Standards to Assess Compliance
1. Alabama	Y	Y	N	Inspection	RCRA
2. Alaska	Y	Y	Y	Develop formal plan	S ¹
3. Arizona	Y	Y	Y	Inspection	RCRA
4. California	Y	Y	Y	Inspection	S
5. Connecticut	Y	Y	Y	Inspection	RCRA
6. Dist. of Columbia	N	Y	N	Inspection	RCRA
7. Delaware	Y	Y	Y	Inspection	S
8. Florida	Y	Y	Y	Inspection	RCRA
9. Georgia	Y	Y	Y	Inspection	RCRA
10. Hawaii	Y	Y	N	Inspection	RCRA
11. Idaho	N	Y	N	Develop a database	RCRA
12. Illinois	N	Y	Y	Inspection	RCRA
13. Kentucky	N	Y	Y	Inspection	RCRA
14. Louisiana	Y	Y	Y	Inspection	RCRA
15. Maryland	Y	Y	Y	Inspection	S
16. Missouri	Y	Y	N	Inspection	RCRA
17. Mississippi	Y	Y	Y	Inspection	RCRA
18. Montana	Y	Y	Y	Inspection	RCRA
19. Nevada	Y	Y	Y	Inspection	RCRA
20. New Jersey	Y	Y	Y	Inspection	RCRA
21. New York	Y	Y	N	Inspection	RCRA
22. North Carolina	Y	Y	N	Inspection	RCRA
23. North Dakota	Y	Y	N	Inspection	RCRA
24. Ohio	Y	Unsure	Y	Inspection	RCRA
25. Pennsylvania	Y	Y	Y	Inspection	RCRA
26. South Carolina	Y	Y	Y	Notification	RCRA
27. South Dakota	Y	Y	N	Inspection	RCRA
28. Texas	Y	Y	Y	Inspection	S
29. Utah	Y	Y	Y	Inspection	RCRA
30. Virginia	Y	Y	Y	Inspection	S
31. Washington	Y	Unsure	Y	Inspection	RCRA

¹States having stricter compliance standards generally required installation of specific monitoring devices and techniques or maintenance and reconciliation of monthly inventory control records, and installation of secondary containment USTs in certain areas.

Appendix E. Comparison of State and DoD Inventories

State	Location	State Inventory	DoD Inventory	Difference (State - DoD)
AK	Eielson Air Force Base	56	35	21
AK	Elmendorf Air Force Base	156	71	85
AK	All Alaska Sites	57	140	-83
		436	246	190
AL	Redstone Arsenal	10	9	1
AZ	Fort Huachuca	42	28	14
CA	Fort Irwin	7	10	-3
CA	MCLB Barstow	14	16	-2
CA	MCACC 29 Palms	14	47	-33
CA	MCAS El Toro	69	71	-2
CA	MCAS Tustin	11	14	-3
CA	MCMWTC Bridgeport	NA	7	
CA	NCBC P- Hueneme	14	14	0
CA	FISC Oakland	2	2	0
CA	Naval Air Station Lemoore	31	19	12
CA	NALF San Clem Island	NA	7	
CA	Marine Corps Base Camp Pendleton	0	87	-87
CA	Public Works Center San Diego	0	11	-11
CA	Naval Air Station Miramar	0	46	-46
CA	Naval Air Station North Island	257	56	201
		419	400	19
CT	Stratford Engine Plant	0	0	0
DC	Bolling Air Force Base	10	14	-4
DC	Naval Research Laboratory Washington	5	12	-7
		15	26	-11
DE	Dover Air Force Base	43	6	37
FL	Eglin Air Force Base	NA	85	
FL	Florida(National Guard Bureau)	NA	46	
FL	Naval Training Center Orlando	NA	15	
FL	Naval Air Station Key West	NA	14	
FL	Naval Air Station Mayport	NA	23	
FL	Naval Air Station Jacksonville	NA	32	
FL	Naval Air Station Pensacola	NA	19	
FL	Naval Air Station Cecil Field	NA	49	
			243	
GA	Moody Air Force Base	49	47	2
GA	Fort Gordon	35	16	19
GA	Fort Benning	353	115	238
GA	NMCRC Atlanta	1	0	1
GA	Naval Submarine Base Kings Bay	54	58	-4
		492	236	256
HI	Hickam Air Force Base	59	52	7
HI	U.S. Army Garrison	108	113	-5
HI	MCAS Kaneohe Bay	67	34	33

Appendix E. Comparison of State and DoD Inventories

State	Installation	State USF Inventory	DoD USF Inventory	Difference Between State and DoD (USF)
HI	Naval Station Pearl Harbor	16	11	5
HI	Naval Air Station Barbers Point	14	11	3
		264	221	43
ID	Mountain Home Air Force Base	25	24	1
IL	Illinois(National Guard Bureau)	31	30	1
KY	Fort Campbell	32	107	-75
KY	Fort Knox	114	104	10
		146	211	-65
LA	Barksdale Air Force Base	23	33	-10
LA	Fort Polk	64	66	-2
LA	Naval Air Station New Orleans	20	13	7
		107	112	-5
MD	Adelphi Lab	8	12	-4
MD	NSWC Indian Head	11	25	-14
		19	37	-18
MO	Whiteman Air Force Base	NA	69	
MS	Naval Air Station Meridian	11	10	1
MT	Malstrom Air Force Base	266	250	16
NC	Seymour Johnson Air Force Base	9	14	-5
NC	Fort Bragg	244	221	23
NC	Marine Corps Base Camp Lejeune	91	92	-1
NC	MCAS Cherry Point	4	5	-1
		348	332	16
ND	Minot Air Force Base	80	97	-17
NJ	McGuire Air Force Base	NA	31	
NJ	Picatinny Arsenal	NA	0	
NJ	New Jersey(National Guard Bureau)	NA	56	
NJ	Fort Dix	NA	40	
NJ	Fort Monmouth	NA	259	
			386	
NV	Nellis Air Force Base	58	50	8
NV	Naval Air Station Fallon	NA	20	
			70	
NY	Gabreski	NA	3	
NY	Griffiss Air Force Base	17	43	-26
NY	Fort Drum	114	37	77
NY	Fort Hamilton	9	10	-1
		140	93	50
OH	Springfield	NA	7	
OH	Wright-Patterson Air Force Base	99	111	-12
		99	118	-12
PA	Fort Indiantown Gap	13	16	-3
PA	Letterkenny Depot	12	9	3
PA	99th Regional Command	NA	2	
PA	NAWC Warminster	3	3	0
		25	30	-8
SC	MCAS Beaufort	14	13	1
SD	Ellsworth Air Force Base	259	91	168

Appendix E. Comparison of State and DoD Inventories

State	DoD Inventory	State Inventory	DoD Inventory	Difference (State - DoD)
TX	Kelly Air Force Base	18	19	-1
UT	Hill Air Force Base	30	30	0
VA	DGSC Richmond	35	50	-15
VA	MCCDC Quantico	36	31	5
		71	81	-10
WA	McChord Air Force Base	54	53	1
	Totals	3358	2834	524

DGSC	Defense General Supply Center
FISC	Fleet Industrial Supply Center
MCACC	Marine Corps Air Ground Combat Center
MCAS	Marine Corps Air Station
MCCDC	Marine Corps Combat Development Command
MCLB	Marine Corps Logistics Base
MCMWTC	Marine Corps Mountain Warfare Training Center
NAWC	Naval Air Warfare Center
NCBC	Naval Construction Battalion Center
NMCRC	Navy and Marine Corps Reserve Center
NSWC	Naval Surface Warfare Center

- The 28 states reported that DoD has a total of 524 more USTs than DoD reported.

- Variances¹ on a site-by-site basis show that of the 83 sites included in the audit:

- the states reported 1,011 more USTs than DoD reported at 28 sites,
- DoD reported 487 more USTs than the states reported at 29 sites, and
- 26 sites either had no differences or comparisons could not be made because data was unavailable.

¹ The total number of variances is the sum of the state and DoD variances.

Appendix F. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Deputy Under Secretary of Defense (Environmental Security)
Assistant Deputy Under Secretary of Defense (Environmental Quality)
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Public Affairs)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy
Dudley Knox Library, Naval Postgraduate School

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Appendix F. Report Distribution

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on Government Management, Information and Technology,
Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal
Justice, Committee on Government Reform and Oversight
House Committee on National Security

Audit Team Members

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